

CLAIMS

1. A cover assembly for use with a fitting of the type which is disposed in a floor and has an inner compartment accessible through an opening in the upper surface of the floor, the fitting being configured so that source cables can be routed into the inner compartment from a location below the upper surface of the floor, the cover assembly comprising:

a mounting bracket connectable to the fitting at a location which overlies the floor opening, the mounting bracket being adapted to support at least one receptacle within the fitting such that the receptacle can be interconnected with a source cable within the inner compartment and can be interconnected from above the floor with a connector;

a cover plate connected to the mounting bracket and overlying the electrical receptacle, the cover plate having an access door movable between a first position at which the door overlies the receptacle to prevent access thereto and a second position at which the receptacle is exposed and accessible through the cover plate;

a first seal member interposed between the mounting bracket and the cover plate and being adapted to seal against water infiltration between the mounting bracket and the cover plate and into the fitting; and

a second seal member interposed between the mounting bracket and the floor and being adapted to seal against water infiltration between the mounting bracket and the floor and into the fitting.

2. A cover assembly as set forth in claim 1, wherein the first seal member overlies the receptacle and at least the portion of the mounting bracket adjacent to and surrounding the perimeter of the receptacle, the first seal member including an access opening which provides access to the receptacle, an upwardly extending rib formed around the perimeter of the access opening and being positioned to abut with the

access door when the access door is at its closed position so as to seal against water infiltration between the rib and the door, and a downwardly extending rib configured to mate with a reciprocal groove formed in the mounting bracket around the perimeter of the receptacle so as to seal against water infiltration between the first seal member and the mounting bracket.

3. A cover assembly as set forth in claim 1, wherein the second seal member comprises at least one gasket extending around the perimeter of the floor opening and being adapted to be compressed between the mounting bracket and the upper surface of the floor when the mounting bracket is connected to the fitting.

4. An access cover as set forth in claim 1, wherein the access door is slidably connected to the cover plate for movement between its first and second positions.

5. An access cover as set forth in claim 1, wherein the mounting bracket is adapted to support at least one power receptacle.

6. An access cover as set forth in claim 1, wherein the mounting bracket is adapted to support at least one communication/data receptacle.

7. An access cover as set forth in claim 1, wherein the first seal comprises a bead seal configured to mate with a reciprocal groove formed in the mounting bracket.

8. An access cover as set forth in claim 1, wherein the cover plate includes a top portion, a bottom portion, a plurality of access doors slidably mounted between the top and bottom portions, and a third seal interposed between the top and

bottom portions and being adapted to seal against water infiltration between the top and bottom portions.

9. An access cover as set forth in claim 8, wherein the third seal is co-molded with one of the top and bottom portions.

10. An access cover as set forth in claim 9, wherein the third seal is formed of a compressible polymeric material that is co-molded with one of the top and bottom portions.

11. An access cover as set forth in claim 10, wherein the third seal member is co-molded with the top portion and is configured to seal around the access doors.

12. In a fitting which adapted to be mounted in a floor and support at least one receptacle such that the receptacle can be connected with cables which enter the fitting from below the surface of the floor and can be connected from above the floor with a connector which enters the fitting through an opening in the surface of the floor, a cover assembly comprising:

a trim flange mounted on the surface of the floor and overlying the floor opening, the trim flange including an opening which provides access to the receptacle;

a cover plate mounted on the trim flange and overlying the receptacle, the cover plate having an access door movable between a first position at which the door overlies the receptacle to prevent access thereto and a second position at which the receptacle is exposed and accessible through the cover plate;

a first seal member interposed between the trim flange and the cover plate and being adapted to seal against moisture infiltration between the trim flange and the cover plate, the first seal member including an opening which overlies the receptacle to provide access thereto and an upwardly extending rib formed around the perimeter of the opening in the first seal member, the upwardly extending rib being positioned

to abut with the access door when the access door is at its closed position so as to seal against water infiltration therebetween, the first gasket also including a downwardly extending rib which is configured to mate with a reciprocal groove formed in the trim flange around the perimeter of the receptacle so as to seal against water infiltration between the first seal member and the trim flange; and

a second seal member disposed between the trim flange and the floor and which is adapted to seal against water infiltration between the trim flange and the floor and into the fitting.

13. A cover assembly as set forth in claim 12, wherein the second seal member comprises at least one gasket which extends around the perimeter of the floor opening and is compressed between the floor and the trim flange.

14. A cover assembly as set forth in claim 13, wherein the trim flange is securable to the floor fitting and wherein the at least one gasket is configured to be compressed between trim flange and floor when the trim flange is secured to the floor fitting.

15. An access cover as set forth in claim 12, wherein the trim flange is constructed to function as a mounting bracket for supporting the receptacle within the fitting.

16. An access cover as set forth in claim 12, wherein the access door is slidably connected to the cover plate for movement between its first and second positions.

17. An access cover as set forth in claim 12, wherein the receptacle is a power receptacle.

18. An access cover as set forth in claim 12, wherein the receptacle is a communications/data receptacle.

19. An in-floor fitting of the type which is disposed in a floor and has an inner compartment accessible through an opening in the upper surface of the floor, the fitting being configured so that power cables and communication/data signal cables can be routed into the inner compartment from a location below the upper surface of the floor; the fitting comprising:

a power receptacle mounted in the fitting such that it can be interconnected with a source power cable within the inner compartment of the fitting and can be interconnected from above the floor with a power connector;

a communication/data receptacle mounted in the fitting such that it can be interconnected with a source communication/data signal cable within the inner compartment of the fitting and can be interconnected from above the floor with a communication/data connector;

a cover assembly overlying the floor opening and the receptacles, the cover assembly having a first access door which is movable between a closed position at which it overlies the power receptacle to prevent access thereto and an open position at which the power receptacle is exposed and accessible from above the floor, the cover assembly also having a second access door which is movable between a closed position at which it overlies the communication/data receptacle to prevent access thereto and a second position at which the communication/data receptacle is exposed and accessible from above the floor;

a first seal member interposed cover assembly and the receptacles, the first seal having a first opening which overlies the power receptacle to provide access thereto and a second opening which overlies the communication/data receptacle to provide access thereto, the first seal having a portion which extends upwardly around the perimeter of the first opening and engages against the first access door when the first access door is at its closed position so as to seal against water infiltration into the

fitting, the first seal having a second portion which extends upwardly around the perimeter of the second opening and engages against the second access door when the second access door is at its closed position so as to seal against water infiltration into the fitting.

20. A fitting as set forth in claim 19, further comprising:

a second seal member disposed between the cover assembly and the floor, the second seal member extending around the circumference of the floor opening to seal against water infiltration into the fitting.

21. A fitting as set forth in claim 19, wherein the portion of the first seal member which extends upwardly around the first and second openings comprise ribs.

22. A fitting as set forth in claim 19, wherein the cover assembly comprises:

a trim flange overlying the floor opening and including a center opening which provides access to the receptacles;

a cover plate which carries the first and second access doors and is mounted on the trim flange; and wherein

the first seal is interposed between the trim flange and the cover plate.

23. A fitting as forth in claim 22, wherein the first seal includes a downwardly extending rib which extends around the receptacles and mates with a reciprocal groove formed in the trim flange.

24. A fitting as set forth in claim 22, wherein the access doors are slidably connected to the cover plate for movement between their open and closed positions.

25. A fitting as set forth in claim 22, wherein the trim flange is adapted to support the power and communication/data receptacles within the fitting.

26. A cover assembly for a flush poke-thru wiring fitting of the type which is adapted to be supported in a floor opening in a floor of a building structure; which includes an insert having an upper end adjacent to the surface of the floor and having a chamber defined therein which extends downwardly from the upper end which has a fire stopping material disposed in the insert so that the fire rating of the floor, with the floor opening formed in the floor and with the poke-thru wiring fitting supported in the floor opening, is substantially the same as the fire rating of the floor without the floor opening formed in the floor; which is adapted to have source power service cables and source communication/data signal service cables connected with the poke-thru wiring fitting, which source power and source signal service cables may be disposed in a plenum below the floor's surface before the floor opening is formed; which has at least one power receptacle mounted in the chamber so as to be adapted to be connected with a source power cable and so as to be adapted to have an above floor power connector selectively connected therewith; and which has at least one communication/data receptacle mounted in the chamber so as to be adapted to be connected with a source service cable and so as to be adapted to be adapted to have an above floor signal connector selectively connected therewith, the cover assembly comprising:

a first portion connectable to the fitting, the first portion having a generally planar body which overlies the floor opening and a flange which extends around the perimeter of the planar body and overlies the surface of the floor, the body of the first portion including an opening which provides access to the at least one power receptacle and the at least one communication/data receptacle;

a second portion mountable on the first portion and overlying the opening in the first portion, the second portion having at a plurality of access doors slidably connected thereto, each of the access doors being associated with a different one the power and signal receptacles, and being movable between a first position at which it

overlies the associated receptacle and a second position at which the associated receptacle is exposed and accessible from above the floor;

a first seal member interposed between the cover assembly first and second portions and being adapted to seal against water infiltration therebetween, the first seal member including a plurality of openings which provide access to the receptacles, the first seal member further including a plurality of upwardly extending ribs which extend around the perimeters of the openings, the ribs being positioned to engage against the access doors when the doors are in their closed positions to seal against water infiltration therebetween, the first seal member further including a downwardly extending rib which is configured to mate with a reciprocal groove formed in the cover assembly first portion around the perimeter of its central opening so as to seal against water infiltration therebetween; and

a second seal member disposed between the flange of the cover assembly first portion and the floor, the second seal member extending around the circumference of the floor opening to seal against water infiltration into the floor fitting.

27. A cover assembly as set forth in claim 26, wherein the central opening in the first portion is adapted to support at least one power receptacle that has at least one power receptacle and at least one communication/data receptacle within the chamber such that the receptacles can be connected with source cables within the chamber and can be selectively connected to above floor power and communication/data connectors, respectively.

28. In a fitting which is adapted to be mounted in a floor and support at least one receptacle such that the receptacle can be connected with source cables which enter the fitting from below the surface of the floor and can be connected from above the floor with a connector which enters the fitting through an opening in the surface of the floor, a cover assembly comprising:

a bottom portion connected to the fitting at a location which overlies the floor opening;

a top portion connected to the bottom portion;  
at least one access door slidably mounted between the top and bottom portions for movement between a first position at which it overlies the at least one receptacle and a second position at which the at least one receptacle is exposed and accessible through the floor opening; and  
a seal member co-molded with one of the top and bottom portions and being adapted to seal against water infiltration between the top and bottom portions.

29. A cover assembly as set forth in claim 28, wherein the seal member is formed of a compressible polymeric material that is co-molded with one of the top and bottom portions.

30. An access cover as set forth in claim 28, wherein seal member adapted to seal around the access doors.

31. In a fitting which adapted to be mounted in a floor and support at least one power receptacle such that the receptacle can be connected with source power cables which enter the fitting from below the surface of the floor and can be connected from above the floor with a power connector which enters the fitting through an opening in the surface of the floor, a cover assembly comprising:

a trim flange mounted on the surface of the floor and overlying floor opening, the trim flange including an opening which provides access to the electrical receptacle;

a cover plate mounted on the trim flange and overlying the electrical receptacle, the cover plate including a top portion, a bottom portion connected to the top portion, an access door slidably mounted between the top and bottom portions for movement between a first position at which it overlies the receptacle and a second position at which the receptacle is exposed and accessible through the floor opening,

and a cover plate seal member disposed between the top and bottom portions and being adapted to seal against water infiltration between the top and bottom portions;

an inner seal member interposed between the trim flange and the cover plate and being adapted to seal against moisture infiltration between the trim flange and the cover plate;

an outer seal member disposed between the trim flange and the floor and which is adapted to seal against water infiltration between the trim flange and the floor.

32. An access cover as set forth in claim 31, wherein the cover plate seal member is co-molded with one of the top and bottom portions.

33. An access cover as set forth in claim 31, wherein the cover plate seal member is co-molded with the top portion and is configured to seal around the access doors.